Message

From: Greene, Nikia [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=32A08A414A4F40199B557C0819EB7D0B-GREENE, NIKIA]

Sent: 11/28/2018 4:12:54 PM

To: Mark Thompson [MThompson@montanaresources.com]; Hilmo, Tim (RWH Engineering) [Tim.Hilmo@bp.com];

Bryson, Josh [josh.bryson@bp.com]

CC: Shanight, David [ShanightDT@cdmsmith.com]

Subject: FW: Additional Air Quality Studies - Re: Meeting Request

FYI:

Nikia Greene Remedial Project Manager U.S. EPA, Region 8 (406)-457-5019 greene.nikia@epa.gov

From: Greeley Neighborhood <Greeleyneighborhoodbutte@outlook.com>

Sent: Sunday, November 25, 2018 4:24 PM

To: Sullivan, Karen <ksullivan@bsb.mt.gov>; Hailer, Katie <KHailer@mtech.edu>; David Hutchins <dhutchins@mtech.edu>; Rolich, John <jrolich@bsb.mt.gov>; Palmer, Dave <dpalmer@bsb.mt.gov>; Sesso, Jon <jsesso@bsb.mt.gov>; Crain, Julia <jcrain@bsb.mt.gov>; Maffei, Mollie <mmaffei@bsb.mt.gov>; Danette Melvin <danette.melvin@gmail.com>; Greene, Nikia <Greene.Nikia@epa.gov>; Reed, Daryl <dreed@mt.gov>; D Kuenzli <dkuenzli@mt.gov>; B-SB Commissioners <Commissioners@bsb.mt.gov>

Cc: Steven McGrath <stevenfrancismcgrath@gmail.com>; Hassler, Eric <ehassler@bsb.mt.gov>; Larry Winstel <mtpilot@live.com>

Subject: Additional Air Quality Studies - Re: Meeting Request

Dr. Katie Hailer

Thank you for working on a grant for more studies.

As to your questions - "How much evidence/data do you think you need in order to make a case, so to speak? How many air monitors? (All PM 10 or some TSP?) Is a years worth of air data sufficient? How many locations and where? "

I think the individuals and agencies that Karen Sullivan asked us to keep in the loop would be much better qualified to answer your questions as to what would be needed to establish a Local Metals Air Quality Standard then I would.

Therefore I am forwarding you questions to them, and asking that they get back to you/us with a recommendation.

R. Edward Banderob Pres. GNCDCInc.
On 11/25/2018 1:06 PM, Katie Hailer wrote:
Ed,
How much evidence/data do you think you need in order to make a case, so to speak? How many air monitors? (All PM 10 or some TSP?) Is a years worth of air data sufficient? How many locations and where?
I think we need to have data points from several locations in town, not just Greeley. The more evidence to show that not just your neighborhood, but many parts of Butte are being impacted, the more likely we can get people interested and involved in pushing for change.
Since we don't have a set limit for these metals in the particulate, and proving that PM10 should be looked at is an uphill battle, I think bioavailability studies are absolutely necessary. We won't ever get any traction without evidence that these small amounts of metals are actually bioavailable and can be soluble and absorbed. (and harmful to human health)
I am working on a grant (with David) that will be submitted mid February to the Superfund division of the National Institutes of Health. Getting grant money is a labor intensive process with a very low success rate, but I feel it's worth trying. I am happy to try and incorporate some of your thoughts and "wants" in to the grant.
Katie
On 11/19/2018 3:47 PM, Sullivan, Karen wrote: Thanks for the email, Steve. As indicated last week, I am more than willing to meet with the proposed stakeholder group, and have Health Department staff attend as well, but I want EPA and DEQ involved. As also previously indicated, the Butte-Silver Bow Health Department is under contract with DEQ to measure and monitor air quality from our Greeley station (PM 2.5). We have no funding from any

source, including DEQ, to measure and monitor for TSP and PM 10. I agree with you that before any

local standard for TSP and PM 10 could be established (there are no similar standards at the state and federal level), more data would be required – we are not funded to go after that data.

In this reply to you, I am copying in Nikia Greene from the EPA and Daryl Reed from DEQ, as well as Doug Kuenzli from DEQ. It is important to have involvement from these agencies, not only from a monitoring and standard-establishment standpoint, but EPA and DEQ also have environmental jurisdiction over Montana Resources' operations. As the Greeley neighborhood coalition plans for a stakeholder meeting, please include these people in your replies — I appreciate it — thanks very much — Karen Sullivan

From: Steven McGrath [mailto:stevenfrancismcgrath@gmail.com]

Sent: Saturday, November 17, 2018 11:45 AM **To:** Sullivan, Karen skyllivan@bsb.mt.gov>

Cc: Hailer, Katie KHailer@mtech.edu; David Hutchins dhutchins@mtech.edu; Rolich, John jrolich@bsb.mt.gov; Palmer, Dave dpalmer@bsb.mt.gov; Sesso, Jon jsesso@bsb.mt.gov; Hassler, Eric ehassler@bsb.mt.gov; Crain, Julia jcrain@bsb.mt.gov; Maffei, Mollie mmaffei@bsb.mt.gov;

Danette Melvin danette.melvin@gmail.com; Greeley Neighborhood

<Greeleyneighborhoodbutte@outlook.com>

Subject: Re: Meeting Request

Karen,

Again, thank you for your positive response to our efforts. I think a preliminary meeting of our Task Force with you and Mr. Rolich and any others you deem appropriate would help to outline a path forward. In my mind, one of the biggest initial hurdles is establishing an air monitoring program that collects data of the quality produced by Dr. Hailer for the metal content of the Total Suspended Particulate and the PM10 fraction. Relying on anecdotal data such as the residents were forced to collect will not be of any value going forward. Before we can talk about research on health effects or establishing a local standard for metal loading in the dust, we need data. Also, we won't be able to definitively answer whether MR is making progress in their fugitive dust abatement unless we have the data.

I assume that your schedule may be full with the upcoming holidays, but when you are available, we would welcome a smaller preliminary meeting prior to a larger convocation of stakeholders.

Best regards and Happy Thanksgiving,

Steve McGrath, Chair Greeley Neighborhood Community Development Corporation Inc. -Habitability - Mining Impact Task Force

On Thu, Nov 15, 2018 at 12:59 PM Sullivan, Karen <ksullivan@bsb.mt.gov> wrote:

Nice meeting you last night, Steve. I agree that a stakeholder focus group would have value, including EPA and DEQ. Hope to see you soon – Karen

From: Steven McGrath [mailto:stevenfrancismcgrath@gmail.com]

Sent: Wednesday, November 14, 2018 10:27 PM **To:** Sullivan, Karen < ksullivan@bsb.mt.gov>

Cc: Hailer, Katie < KHailer@mtech.edu; David Hutchins < dhutchins@mtech.edu; Rolich, John < irolich@bsb.mt.gov; Palmer, Dave < dpalmer@bsb.mt.gov; Sesso, Jon < jsesso@bsb.mt.gov; Palmer, Dave < dpalmer@bsb.mt.gov; Sesso, Jon < jsesso@bsb.mt.gov; Palmer, Dave < dpalmer@bsb.mt.gov; Sesso, Jon < jsesso@bsb.mt.gov; Palmer, Dave < dpalmer@bsb.mt.gov; Sesso, Jon < jsesso@bsb.mt.gov; Sesso.

Hassler, Eric <ehassler@bsb.mt.gov>; Crain, Julia <<u>jcrain@bsb.mt.gov</u>>; Maffei, Mollie

<mmaffei@bsb.mt.gov>; danette.melvin@gmail.com

Subject: Re: Meeting Request

Karen,

Thank you for your prompt response and willingness to move forward on this issue. Initially, we need more data on the metal content of particulate received by the neighborhood, and we welcome any opportunity to begin a monitoring program that addresses that need. However, we are encouraged by the improvement in the air quality as defined by the PM2.5 standard and appreciate the efforts of the BSB Health Department in that regard. We agree that participation in a meeting by all stakeholders would be the optimal scenario.

Again, thank you for your willingness to confront the dust problem and to discuss further research on possible health effects that may arise from chronic exposure to metals in the dust.

Steven McGrath, Chair

Greeley Neighborhood Community Development Corporation Inc. -

Habitability - Mining Impact Task Force

On Wed, Nov 14, 2018 at 5:10 PM Sullivan, Karen < ksullivan@bsb.mt.gov > wrote:

Hi Steve: Thank you for this email. I am copying in here John Rolich, who is the director of our Environmental Health Division, and other Butte-Silver Bow stakeholders.

John Rolich has forwarded your email to the Montana Department of Environmental Quality, as I would want DEQ – along with John and me and possibly other county stakeholders – to attend the meeting you have requested. As you likely know, the Health Department does not currently measure from our Greeley Air Station for PM10 or Total Suspended Particles. Our station does measure for PM2.5, under contract with DEQ. I want DEQ's involvement in the meeting you requested because establishment of a new standard related to PM10 or TSP may involve state statute or a revision of such statute. And we of course would desire a funding source in the pursuit of more data related to

PM10 and TSP. Additionally, DEQ has jurisdiction over Montana Resources, Inc., in regard to environmental standards.

The Butte-Silver Bow Board of Health recently authorized the expenditure of funds from the Health Initiatives component of the Redevelopment Trust to conduct a follow-up chemical mass balance study (PM2.5) — this will be conducted next winter by Tony Ward, PhD, from the University of Montana, who conducted a similar study five years ago. We asked for this study to determine whether our Woodstove Change-out Program in the Greeley neighborhood had positive effect. I'm attaching a synopsis of the Ward study (and an accompanying airshed study by Kumar Ganesan, PhD, of Montana Tech). I will assume that our conducting a new chemical mass balance study focused on PM2.5 will bring you little comfort, as you are requesting study of PM10 and TSP as related to the metals cited in Dr. Hailer's study, and the establishment of local related standards. But I did want to let you know that a follow-up study by Ward will be occurring.

Again, my request of DEQ will be to be part of this meeting – I will let you know, Steve, when and what we hear back from DEQ. I look forward to the discussion – Karen Sullivan

From: Steven McGrath [mailto:stevenfrancismcgrath@gmail.com]

Sent: Wednesday, November 14, 2018 1:27 PM **To:** Sullivan, Karen < ksullivan@bsb.mt.gov>

Cc: Hailer, Katie < KHailer@mtech.edu>; David Hutchins < dhutchins@mtech.edu>

Subject: Meeting Request

Attn: Karen Sullivan, Director B-SB Health Department

On behalf of the Greeley Neighborhood Community Development Corporation

Inc. - Habitability - Mining Impact Task Force I would like to request a conference with you, Dr. Katie Hailer, David Hutchins, and the members of the GNCDCInc. - H - MITF to discuss the creation of a program to collect appropriate data with the ultimate goal of setting a local PM 10 and TSP Air Quality Standard on the basis of metal exposure for at least the five major toxic metals detected in Dr. Hailer's study, and the possibility of the B-SB Health Department commissioning an appropriate study/investigation to determine such an obtainable local PM 10 and TSP Metals Air Quality Standard.

Respectfully requested,

Steven McGrath, Chair Greeley Neighborhood Community Development Corporation Inc. -Habitability - Mining Impact Task Force cc: Dr. Katie Hailer, David Hutchins Messages and attachments sent to or from this email account pertaining to the City-County of Butte-Silver Bow business may be considered public or private records depending on the message content (Article II Section 9, Montana Constitution; 2-6 MCA).

Messages and attachments sent to or from this email account pertaining to the City-County of Butte-Silver Bow business may be considered public or private records depending on the message content (Article II Section 9, Montana Constitution; 2-6 MCA).

Messages and attachments sent to or from this email account pertaining to the City-County of Butte-Silver Bow business may be considered public or private records depending on the message content (Article II Section 9, Montana Constitution; 2-6 MCA).

[&]quot;Neighborhood Communities can still be found by those who are willing to seek them!"